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FORM PTO 1390 U.S. DEPARTN OF CONTROL OF CON		1999CH006
INTERNATIONAL APPLICATION NO. PCT/IB00/00981	INTERNATIONAL FILING DATE 18/07/2000 (18 July 2000)	PRIORITY DATE CLAIMED 19/07/1999 (19 July 1999)

TITLE OF INVENTION:

CLAIMS

INCREASING THE WET SLIPPAGE PROPERTIES OF TEXTILE MATERIAL, AND WET-ACTING LUBRICANTS FOR THIS PURPOSE

APPLICANT(S) FOR DO/EO/US: Bernard DANNER, et al.

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items under 35 U.S.C. 371:

- 1. \underline{X} This express request to immediately begin national examination procedures (35 U.S.C. 371(f)).
- 2. X The U.S. National Fee (35 U.S.C. 371(c)(1)) and other fees as follows:

(1) FOR	(2) NUMBER FILED	(3) NUMBER EXTRA	(4) RATE		(5) CAL	CUL	ATIONS
TOTAL CLAIMS	16 - 20 =	0	х	\$18.00			
INDEPENDENT CLAIMS	2 - 3=	0	х	\$84.00			
MULTIPLE DEPENDENT CLAIMS (if applicable) + 280.00							
BASIC NATIONAL FEE (37 CFR 1.492(a) (1)-(4): X For filing with EPO or JP search report (37 CFR 1.492(a)(5) \$ 890.00							890.00
International Preliminary Examination fee paid to USPTO (37 CFR 1.482) 740.00							
No international preliminary examination fee paid to USPTO (37 CFR 1.482) but international search fee paid to USPTO (37 CFR 1.445(a)(2)) 710.00							
Neither international preliminary examination fee paid to USPTO (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO 1,040.00							
International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Articles 33(2)-33(4)							
Surcharge of \$135.00 for furnishing the National fee or oath or declaration later than _ 20 _ 30 months from the earliest claimed priority date (37 CFR 1.492(e)).							
	TOTAL OF ABOVE CALCULATIONS		=	\$	890.00		
SUBTOTAL			+	\$	890.00		
Processing fee of \$135.00 for furnishing the English translation later than □ 20 □ 30 months from the earliest claimed priority date (37 CFR 1.492(f)).					-		
TOTAL NATIONAL FEE						\$	890.00
Fee for recording the enclosed assignment (37 CFR 1.21(h)).					+		40.00
	TOTAL FEES ENCLOSED				\$	930.00	
Please charge my Denosit As	2060 in	the amount of C 020	00 4				J1: a.a.a.

- a. X Please charge my Deposit Account No. <u>03-2060</u> in the amount of \$<u>930.00</u> to cover the above fees. A duplicate copy of this sheet is enclosed.
- b. X The Commissioner is authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 03-2060. A duplicate copy of this sheet is enclosed.

* 35

3.	<u>x</u>	A co	py of the	ational Application as filed (35 USC 371(c)(2)) JLARC'd PCT/PTO 17			
		a.		is transmitted herewith (required only if not transmitted by the International Bureau) and English translation			
		ъ.		is not required, as the application was filed in the US Receiving Office (RO/US)			
	<u> </u>	c.	<u>x</u>	has been transmitted by the International Bureau.			
	Σ	A translation of the International Application into English (35 USC 371(c)(2)).					
5.		Ame	ndments	to the claims of the International Application under PCT Article 19 (35 USC 371(c)(3)).			
		a.		. Are transmitted herewith (required only if not transmitted the International Bureau)			
		ъ.		Have been transmitted by the International Bureau.			
5. 		A translation of the amendments to the claims under PCT Article 19 (35 USC 371(c)(3)).					
' .	<u>x</u>	An oath or declaration of the inventor (35 USC 371(c)(4)).					
•	x	A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 USC 371(c)(5)).					
Other (docume	nt(s) or	informat	ion included:			
		An information Disclosure Statement under 37 CFR 1.97 and 1.98.					
0.	<u>x</u>	An assignment document for recording. Please mail the recorded assignment document to the person whose signature, name and address appears at the bottom of this page.					
0.1	<u>x</u>	A copy of the International Filing Receipt.					
0.2	<u>x</u>	A copy of the International Search Report.					
0.3	<u>x</u>	A copy of the International Preliminary Examination Report.					
0.4		A copy of Form PCT/IB/306 - Notification of the Recording of a Change					
0.5	<u>x</u>	Preliminary Amendment deleting multiple dependent claims.					
1.	<u>x</u>	The a	above ch	necked items are being transmitted:			
		X		ty (30) months and a proper demand for International Preliminary Examination was made by the 19th month the earliest claimed priority date.			
2.		At th	e time o	f transmittal, the time limit for amending claims under Article 19:			
		a.	х	has expired and no amendments were made.			
		b.		has not yet expired.			
3.	X	Artic	le 34 A	Amendments prior to International Preliminary Examination Report			
14.		Certa	in requi	rements under 35 USC 371 were previously submitted by the applicant on,			

Scott E. Hanf, Registration No. 38,906

Clariant Corporation 4331 Chesapeake Drive

Charlotte, North Carolina 28216

Telephone: 704/395-6712 Facsimile: 704/395-6727 Date: January 17, 2002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Express Mail Label Number: ET825363541US

ET 825363541 US

Date of Mailing: January 17, 2002

CERTIFICATION UNDER 37 CFR 1.10

I hereby certify that on the date indicated above this International application and the documents referred to as enclosed therein, of:

Inventor:

Bernard DANNER

Francis PALACIN

For:

INCREASING THE WET SLIPPAGE PROPERTIES OF TEXTILE

MATERIAL, AND WET-ACTING LUBRICANTS FOR THIS PURPOSE

International Application No.: PCT/IB00/00981 International Filing Date: 18/07/2000 (18 July 2000) Priority Filing Date: 19/07/1999 (19 July 1999)

is being deposited with the United States Postal Service as "Post Office to Addressee" Express Mail addressed to the Assistant Commissioner for Patents, Attention: Box PCT (DO/EO/US), Washington, D.C. 20231 in accordance with 37 CFR 1.10.

Vicki L. Sgro

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re new U.S. patent application of

Bernard DANNER, et al. Serial No. To Be Assigned Filed: January 17, 2002

For:

INCREASING THE WET SLIPPAGE PROPERTIES OF

TEXTILE MATERIAL, AND WET-ACTING LUBRICANTS FOR THIS PURPOSE

<u>Transmittal Letter</u> <u>Notification of Amendments Under PCT Article 34</u>

Assistant Commissioner for Patents Washington, D.C. 20231

Dear Sir:

Preliminary to the examination of the above-identified application, an Amendment was filed under Article 34 of the Patent Cooperation Treaty prior to the International Preliminary Examination. Please note that the attached pages 2, 31, 32, and 33 were filed with the European Patent Office on September 5, 2001. We have enclosed the English translations of these pages.

Applicant respectfully requests submission of these pages before examination of the application.

Respectfully submitted,

Scott E. Hanf, Registration No. 38,906

:Attn: Box PCT DO/EO/US

(CUSTOMER NUMBER 25,255)

Clariant Corporation Industrial Property Department 4331 Chesapeake Drive Charlotte, North Carolina 28216 Telephone: 704/395-6712 Facsimile:704/395-6727

CERTIFICATION UNDER 37 CFR 1.10

Express Mail Label No. ET825363541US

Date of Mailing: January 17, 2002

I hereby certify that on the date indicated above, this new U.S. patent application and the papers indicated as enclosed therein, is being deposited with the United States Postal Service as "Express Mail Post Office to Addressee" addressed to: Assistant Commissioner for Patents, Box PCT DO/EO/US, Washington, D.C. 20231, in accordance with 37 CFR 1.10.

Mailing the Application

Vicki L. Sgro
Typed Name of Person Mailing the Application

particularly high shear forces while developing their action as well as possible for short liquors too. The shorter the liquor, the greater the requisite efficacy of the respective treatment agents since wet slippage of the goods and the achievement of a level, smooth goods appearance without damage to the goods is made more difficult the greater the proportion of liquor taken up by the goods.

It has now been found that certain end-capped polyesters having a certain hydrophilicity, as is sufficient for the polyester to be dispersible or colloidally soluble in water, in particular self-dispersible or colloidally soluble, particularly also end-capped polyesters as otherwise used as soil release agents, surprisingly have an advantageous action as wet-acting lubricants (i.e. as wet-acting slip agents) in the treatment of textile piece goods in rope form or tubular form, particularly made from polyester fibres, in jet dyeing machines, where, for example, they do not hinder or impair the dyeing, but act surprisingly well and extremely superficially on the wet substrate as wet-acting lubricants in surprisingly high efficiency and yield, and further with a high degree of constancy and reproducibility of these properties, even if the products employed come from different lots and/or have been stored for a prolonged time.

The invention relates to the use of such polyesters (P_S) as defined below, as wet-acting lubricants for the treatment of textile material in the form of textile piece goods, particularly in rope form or tubular form, to the corresponding wet-acting lubricants, and to their production and aqueous compositions (W) thereof.

A first subject-matter of the invention is thus the use of

(P_S) water-dispersible or -colloidally soluble, end-capped polyesters

as wet-acting lubricants in the treatment of textile piece goods with a textile treatment agent (T) from aqueous liquor under conditions which would otherwise in the textile substrate favour the formation of transport folds and/or the occurrence of friction in or on the substrate,

or respectively is

a process for the treatment of textile piece goods with a textile treatment agent (T) from aqueous liquor under conditions which would otherwise in the textile substrate favour the formation of transport folds and/or the occurrence of friction in or on the substrate, characterized in that the process is carried out in the presence of a water-dispersible or -colloidally soluble end-capped polyester (P_S) as a wet-acting lubricant.

CLAIMS

- 1. Use of
- (P_S) water-dispersible or -colloidally soluble, end-capped polyesters

as wet-acting lubricants in the treatment of textile piece goods with a textile treatment agent (T) from aqueous liquor under conditions which would otherwise in the textile substrate favour the formation of transport folds and/or the occurrence of friction in or on the substrate.

- 2. Use according to claim 1, characterised in that (P_S) is a polyester made from difunctional compounds (D), and monofunctional compounds (E) which are suitable for the end capping of the polyesters, and/or higher oligo-functional compounds (H) which are suitable for the branching of the polyesters.
- 3. Use according to Claim 1 or 2, characterised in that (P_S) is a polyester (P_S') which is self-dispersible or colloidally soluble in water.
- 4. Use according to one of Claims 1 to 3, characterised in that (P_S) is employed in the form of an aqueous, concentrated composition (W).
- 5. Use according to Claim 4 characterised in that (W) is an aqueous composition which is characterised by a content of (P_S) and
 - (G) a thickening agent.
- 6. Use according to Claim 4 or 5, characterised in that (W), in addition to (P_S) and optionally (G), contains at least one of the following components
 - (X) a non-ionogenic or anionic emulsifier or a mixture of non-ionogenic and/or anionic emulsifiers,
 - (Y) an agent for adjusting the pH
 - and (Z) at least one formulation additive.

- 7. Use according to one of Claims 1 to 6, characterised in that (T) is at least one dye or at least one optical brightener.
- 8. Use according to one of Claims 1 to 7, in the dyeing or optical brightening of textile material made from polyester fibres, optionally blended with other fibres, in jet dyeing machines.
- 9. Use according to one of Claims 1 to 8, in the dyeing or optical brightening of textile material made from polyester microfibres, optionally blended with other fibres of comparable fineness
- 10. Wet-acting lubricant for the dyeing or optical brightening of textile piece goods in rope or tubular form from aqueous liquor under conditions which would otherwise in the textile substrate favour the formation of transport folds or the occurrence of friction in or on the substrate, characterised by a content of (P_S) as defined in one of Claims 1 to 3.
- 11. Aqueous wet-acting lubricant composition which is an aqueous composition (W) which is defined as in one of Claims 4 to 6.
- 12. Aqueous wet-acting lubricant composition (W) according to Claim 11, essentially consisting of (P_S) and water and at least one of the additives (G), (X), (Y) and (Z).
- 13. Process for the production of an aqueous, (G) or/and (X) containing composition (W) according to Claim 12, wherein a melt of (P_S) is mixed in the presence of water with (G) or/and (X) and optionally one or more of (Y) and (Z) is added.
- 14. Process for the treatment of textile piece goods with a textile treatment agent (T) from aqueous liquor, under conditions which would otherwise in the textile substrate favour the formation of transport folds or the occurrence of friction in or on the substrate, characterised in that the process is carried out in the presence of a water-dispersible or -colloidally soluble, end-capped polyester (P_S) as defined in one of Claims 1 to 3, optionally in the form of an aqueous composition (W) as defined in any one of Claims 4 to 6, as a wet-acting lubricant.
- 15. Aqueous polyester composition (W'), essentially consisting of (P_S), (G) and water and optionally at least one of the additives (X), (Y) and (Z), in which (P_S) is as defined in any one of Claims 1 to 3, (G) is as defined in Claim 5, and (X), (Y) and (Z) are as defined in Claim 6.

16. Aqueous polyester composition (W") according to Claim 15, essentially consisting of (Ps'), (G) and water and additionally optionally one or more of the additives (Y) and/or (Z), in the form of an aqueous dispersion or colloidal solution.